

Abstract of the Invention

This invention relates to methods of extracting and purifying bioactive substances from various plants and herbs. More specifically the invention relates to methods of extracting and separating bioactive substances from various plants and herbs, such as Kava root, Byrsonima species, Aesculus californica, Crataegus mexicana, Simmondsia chinensis, Pfaffia species, Alternanthera repens, Bursera species, Turnera species, Perezia species, Heimia salicifolia, Psidium species, Enterlobium species, Ptychopetalum olacoides, Liriosma ovata, and Chaunochiton kappleri, using supercritical fluid extraction and/or fluorocarbon solvent extract. The present invention further relates to separation of bioactive substances contained in extracts using packed column supercritical fluid chromatography or HPLC where dense gas with or without modifiers is the mobile phase. The present invention also relates to pharmaceutical preparations and dietary supplements which may be prepared with the extracted bioactive substances and use of such pharmaceutical preparations and dietary supplements to treat various human ailments.